

crossed pyramidal tracts. The spinal roots were intact, and the author describes a pigmentation of the ganglion cells of the anterior horns. He concludes that the symptoms suggest a classification into two groups.

(1) In children, where the disease is termed acute anterior poliomyelitis.

(2) In older patients, when polyneuritis is accompanied by a special disease of the peripheral nerves, and Landry's paralysis with marked spinal symptoms.

JELLIFFE.

90. INFECTIOUS CAUSATION OF LANDRY'S SYMPTOM. Remlinger (Med. Week, 5, 1897, Nov. 5).

At the Biological Society of Paris, the author recalled a case previously reported by him of an acute ascending paralysis in which the streptococcus was detected in the spinal substance by cultivation, and was also found in stained sections.

In experimenting on the subject Dr. Remlinger has succeeded in producing acute ascending paralysis in a rabbit in which cultivation tests furnished evidence of the presence of the inoculated microbe in the cord. The microbe was a micrococcus derived from septic abscesses in a human patient. Dr. Remlinger thinks his successful production of ascending paralysis in this case is an additional argument in favor of the infective nature of its causation.

MITCHELL.

91. PARALYSIE ASCENDANTE AIGUE (Acute Ascending Paralysis). Hirtz et Lesné (La Presse Médicale, 5, 1897, p. 269).

The case described occurred in a woman of 22, beginning suddenly while she was in the third month of a so far normal pregnancy. The symptoms were first acute and then chronic. The disease lasted about four months, being then terminated by the death of the patient from broncho-pneumonia. Two weeks before death, there was premature delivery, the child living but a few minutes. From this, however, the patient rallied quite well. There was complete paralysis of both lower extremities, and of the right upper extremity, with paresis of the left arm and of the back muscles. The respiratory muscles, and those of the face, tongue, palate, pharynx, and larynx remained intact. The paralyzed muscles showed no reaction of degeneration, but the tendon reflexes were lost. Sensibility was present, and the muscles of the lower extremities were very tender, and the seat of severe pains, increased on movement.

A clear liquid, withdrawn by lumbar puncture two hours after death, proved sterile. The brain and the peripheral nerves showed nothing abnormal. The vessels of both spinal pia mater, and cord proper, were greatly dilated, and their walls infiltrated with leucocytes. This was specially marked in the anterior horns about the ganglion cells. These latter were much altered, especially in the lumbar region, some having disappeared, others being shrunken and their nuclei displaced; others, again, hypertrophied. Above the cervical enlargement the cells were normal, and the vascular lesions disappeared in the bulb. There was no degeneration in the columns of the white matter.

C. L. ALLEN.

92. ZUR PATHOLOGISCHEN ANATOMIE UND AETIOLOGIE DER ACUTEN AUFSTIEGENDEN SPINALPARALYSE—LANDRY (On the Pathological Anatomy and the Etiology of Landry's Paralysis). L. Krewer (Zeits. f. Klin. Med., 32, 1897, p. 115).

Since 1893 the author has observed four cases of Landry's paralysis, in three of which he was enabled to perform autopsies. In his

three fatal cases there was a preceding history of alcoholism, one tubercular, and in all three the nervous symptoms were preceded by an attack of influenza. The pathological findings were those of an acute or subacute multiple neuritis and those of an acute myelitis.

The author concludes that Landry's paralysis should not be considered a disease *sui generis*, but should be regarded as an exceptionally severe form of polyneuritis, which involves not only the peripheral neuron, but also the spinal and the bulbar neurons, and that its chief etiological factor is some acute infectious disease, notably influenza.

JELLIFFE.

93 MULTIPLE NEURITIS FOLLOWING INFLUENZA. H. B. Allyn (Journal American Medical Association, 29, 1897, p. 152).

The author reports six original cases of multiple neuritis following epidemic influenza. From a study of his own and thirty cases collected from other sources his conclusions are as follows:

1. Influenza, like other infectious diseases, may be followed by neuritis and multiple neuritis.

2. One sex does not seem to be more liable to multiple neuritis than the other.

3. It occurs most frequently between the twenty-fifth and forty-fifth years; and appears during convalescence in a few days or two or three weeks after the influenza has subsided.

4. It may present sensory, motor, vasomotor or trophic symptoms, or all combined, but sensory and vasomotor symptoms are more prominent than in diphtheritic and some other cases of multiple neuritis.

5. The great majority of the cases recover, both as regards restoration of function and power as well as regards life. Five of the thirty-six cases collected in this paper died. In one of Bruns' cases the symptoms resembled Landry's paralysis, in the other there was paralysis of the tongue and throat. In Eisenlohr's fatal cases there was general motor paralysis with intense hyperæsthesia of the skin. In Ferguson's case the neuritis was visceral, and in Leyden's fatal case there was coincident disease of the cord.

6. Recovery does not usually take place under four weeks and may be delayed for months.

7. Treatment should consist first of absolute rest in bed. Anodynes must be given in sufficient doses to relieve pain, when that is a prominent symptom. Morphine hypodermically may be necessary, but may be often substituted for with advantage by cocaine. The antipyretic anodynes are insufficient in any safe dose if the patient has pains for many days. The salicylate of cinchonidin is distinctly valuable, especially when the pain is not of the greatest intensity. At a later stage potassium iodide and the bichloride of mercury in small doses are helpful. When the pain is in an extremity, firm pressure with a flannel bandage gives great comfort. Blisters over the painful nerve trunks when they are superficial are also valuable in relieving pain.

Close watch must be kept on the action of the heart and the character of the breathing. Most of the fatal cases die through paralysis of the diaphragm. The closest attention must be given throughout the course of the case to the nutrition of the patient and to the condition of the skin, especially over portions of the body where pressure occurs.

As far as possible the stomach should be reserved for food. Medicine in these cases acts better when given hypodermically, and the stomach is not so likely to be deranged. This caution applies especially to the giving of anodynes.

8. Finally, while he thinks diphtheria as a cause can be excluded in